

CAPSULE SUMMARY

Bridge No. B73 Big Falls Road Bridge over Gunpowder Falls

MIHP# BA 2851

Hereford Vicinity

Baltimore County, Maryland

Constructed 1933, Demolished 2008

Public

Bridge Description/Geographic Location: Bridge No. B73 (BA 2851) carried Big Falls Road over the Gunpowder Falls in northern Baltimore County, Maryland. The structure was located north of MD 138 (Monkton Road), and east of MD 45 (York Road) midway between White Hall, Hereford, and Monkton. Big Falls Road is a rural two-lane road running in a north-south direction with an Average Daily Traffic (ADT) count of approximately 1,000 vehicles. Truck traffic comprises 5 to 10 percent of the ADT. The clear roadway width at the north and south approaches are 24'-0" and 20'-0", respectively.

Bridge Construction Type: Bridge No. B73 was a single span, closed spandrel, concrete rib arch bridge constructed in 1933. The clear span was approximately 79'-0". The superstructure consisted of two 1'-6" wide reinforced concrete rib arches that supported an 11" reinforced concrete deck slab with a 2½" thick integral concrete wearing surface. The rib arches had a rise of approximately 5'-4" from spring-line to crown. The structure had an overall out-to-out width of 22'-9" and a clear roadway width of 20'-1" between concrete curbs. The traffic barrier system consisted of 9" wide concrete parapets that have five sections of closed panels on each side of the bridge. The two end sections each had one incised panel and the three interior sections each have three incised panels. The superstructure is supported on two concrete abutments.

Eligibility of the Bridge: Bridge No. B73 has been identified on the Maryland Inventory of Historic Bridges prepared by the Maryland State Highway Administration and the Maryland Historical Trust, June 1996. The bridge has National Register significance for its age and association with Category A - Events, and Category C - Engineering/architectural character. The Inventory indicates "It is unknown why the first bridge at this site was built" and "this bridge likely was built as part of the State Roads Commission's Lateral and post Roads Loan of 1920." The Inventory indicates "the bridge retains the integrity of design and materials, and is a significant example of an early-twentieth century concrete arch bridge" as well as "the bridge retains the integrity of a majority of its character defining elements".

Mitigation for Adverse Effect: Baltimore County Department of Public Works seeks to mitigate this adverse effect by photographic documentation, and the construction of an interpretive display adjacent to the bridge, as required, by the Division of Historical and Cultural Programs. As outlined in the MOA, documentation of the bridge will be made to the required standards.

Maryland Historical Trust

Maryland Inventory of Historic Properties Form

Inventory No. BA 2851

1. Name of Property

historic Bridge No. B73 (BA 2851), Big Falls Road over Gunpowder Falls

other (N/A)

2. Location

street and number Big Falls Road not for publication

city, town Hereford ☒ vicinity

county Baltimore County, Maryland

3. Owner of Property

(give names and mailing addresses of all owners)

name Baltimore County Department of Public Works

street and number 100 W. Chesapeake Avenue

telephone

city, town Towson

state Maryland

zip code 21204

4. Location of Legal Description

courthouse, registry of deeds, etc. Baltimore County Courthouse

liber -- folio --

city, town Towson

tax map 22

tax parcel

within P. 284

tax ID number --

5. Primary Location of Additional Data

☐ Contributing Resource in National Register District

☐ Contributing Resource in Local Historic District

☒ Determined Eligible for the National Register/Maryland Register

☐ Determined Ineligible for the National Register/Maryland Register

☐ Recorded by HABS/HAER

☐ Historic Structure Report or Research Report at MHT

☐ Other: _____

6. Classification

Category	Ownership	Current Function	Resource Count
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> agriculture	Contributing
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> commerce/trade	Noncontributing
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> defense	_____ buildings
<input type="checkbox"/> site		<input type="checkbox"/> domestic	_____ sites
<input type="checkbox"/> object		<input type="checkbox"/> education	_____ structures
		<input type="checkbox"/> funerary	_____ objects
		<input type="checkbox"/> government	_____ Total
		<input type="checkbox"/> health care	
		<input type="checkbox"/> industry	
		<input type="checkbox"/> landscape	
		<input type="checkbox"/> recreation/culture	
		<input type="checkbox"/> religion	
		<input type="checkbox"/> social	
		<input checked="" type="checkbox"/> transportation	
		<input type="checkbox"/> work in progress	
		<input type="checkbox"/> unknown	
		<input type="checkbox"/> vacant/not in use	
		<input type="checkbox"/> other:	

Number of Contributing Resources
previously listed in the Inventory

7. Description

Inventory No. BA 2851

Condition

☐ excellent ☒ deteriorated
☐ good ☐ ruins
☐ fair ☐ altered

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

Bridge No. B73 (BA 2851) was demolished in 2008.

Maryland Historical Trust

Maryland Inventory of Historic Properties Form

Inventory No. BA 2851

Name
Continuation Sheet

Number 8 Page 1

The structure was located along the eastern edge of the Gunpowder Falls State Park with forested parkland adjacent to the west side of the bridge. The parkland is owned in part by the Department of Forests and Parks and by the Department of Natural Resources. The forested land adjacent to the east side of Big Falls Road Bridge is owned by the Mathews Family, LLC and is partially used as a stone quarry. The land located further south and east of the bridge is owned by The Gunpowder Youth Camps, Inc. and is used as a campground.

According to the Maryland Inventory of Historic Bridges, Historic Bridge Inventory, prepared by the Maryland State Highway Administration and the Maryland Historical Trust:

"It is unknown why the first bridge at this site was built. However, during the early days of improved road construction in Maryland, a policy of building narrow roads and bridges was adopted so that a complete system of highways might be completed within a reasonable time limit and with limited funds. As traffic increased it became necessary to reconstruct existing roads to greater width and strength. In 1918, the State Roads Commission developed the use of a concrete bridge. This bridge was probably built as part of the State Roads Commission's "Lateral and post Roads Loan of 1920." In 1920, the state received an appropriation of \$3,000,000. The money allowed for the construction of rural post roads, lateral roads, and the extension of the State Roads System with the assistance of funds from the U.S. Government and several counties in the state. The state and counties received funding for lateral road improvements.

Between 1920 and 1935, most of the Baltimore County Highways Department work concentrated on the expansion of the feeder roads to the main arteries being built by the State Roads Commission. Unlike other counties in Maryland during this period, Baltimore County maintained its own roads. Like other counties, Baltimore County has a standing contract with consultants to assist in the design and development of bridges. T.A. Ward was the consultant for this project."

9. Major Bibliographical References

Inventory No. BA 2851

1. The Maryland Inventory of Historic Bridges, June 1996, by the Maryland State Highway Administration and the Maryland Historical Trust.
2. Programmatic Section 4(f) Evaluation for Big Falls Road Bridge No. B73 Bridge Replacement Project, 2006, by Whitman, Requardt and Associates, LLP.
3. Categorical Exclusion Document for Big Falls Road Bridge Replacement Project, 2005, by Whitman Requardt and Associates, LLP.
4. The Baltimore County Master Plan, 2000.

10. Geographical Data

Acreage of surveyed property N/A Structure
Acreage of historical setting N/A
Quadrangle name Hereford, MD

Quadrangle scale: 1:24,000

Verbal boundary description and justification

Bridge No. B73 (BA2581) was located between White Hall, Hereford and Monkton in northern Baltimore County where Big Falls Road crosses the Gunpowder Falls. Land owned by the State of Maryland, Department of Natural Resources and Department of Forests and Parks was adjacent to and west of Bridge No. B73. Land owned by the Matthews Family, LLC was adjacent to and east of Bridge No. B73.

The Area of Potential Effects (APE) for this project has been determined by the analysis of topographic maps, roadway alignments and bridge location. The APE has been defined around the project site as an approximate 100-foot wide corridor with approximately 60 feet and 40 feet east and west of the roadway center, respectively. An exception to this limit is along the northeast portion of the project where the APE extends approximately 160 feet from the roadway center to permit grading to improve site distance from a driveway entrance. The corridor generally begins at the point of new construction at the approach roadway to the bridge, and is defined from the stream crossing as approximately 300 feet to the northern project limit, and 300 feet to the southern project limit. The eastern boundary is approximately defined as 50 feet from the edge of pavement at the southern end and 150 feet from the edge of pavement at the northern end. The western boundary is approximately defined as 30 feet from the edge of pavement. The APE included all areas disturbed by the proposed construction as a result of the bridge replacement, road realignment and grading. The APE also included property to be acquired for additional right-of-way. Within the vicinity of the APE there are eight adjoining properties that are close to the project site. Bridge No. B73/BA 2851 is the only structure in the APE; all structures on the adjoining properties are located outside the limits of the APE.

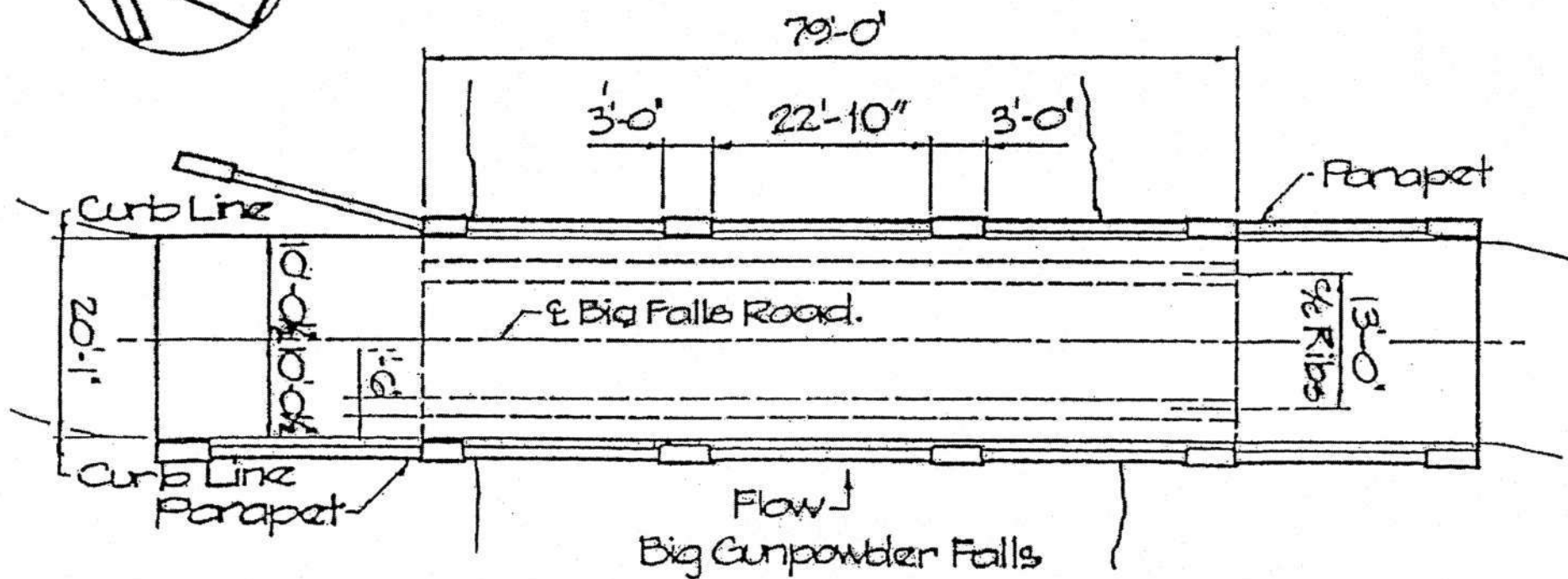
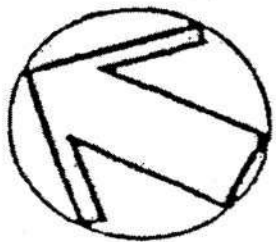
11. Form Prepared by

name/title	Sheryl Bernardo, AICP, RLA Brian Brawand, P.E.		
organization	Whitman, Requardt and Associates, LLP	date	May 2007/Dec., 2008
street & number	801 S. Caroline Street	telephone	(410) 235-3450
city or town	Baltimore	state	Maryland

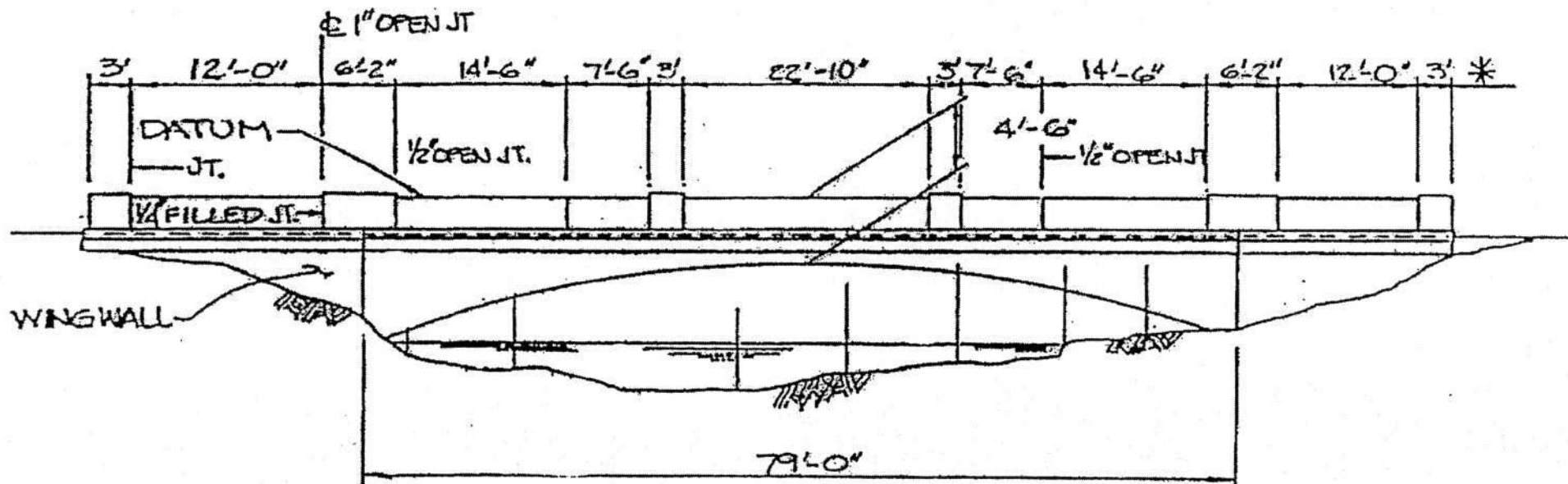
The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

Return to: Maryland Historic Trust
Maryland Department of Planning

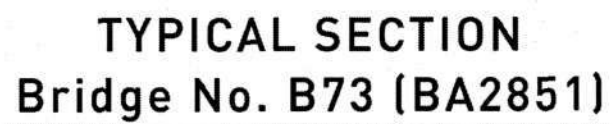


PLAN
Bridge No. B73 (BA2851)



*PARAPET JOINT LOCATIONS

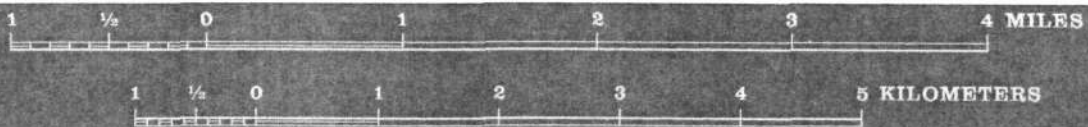
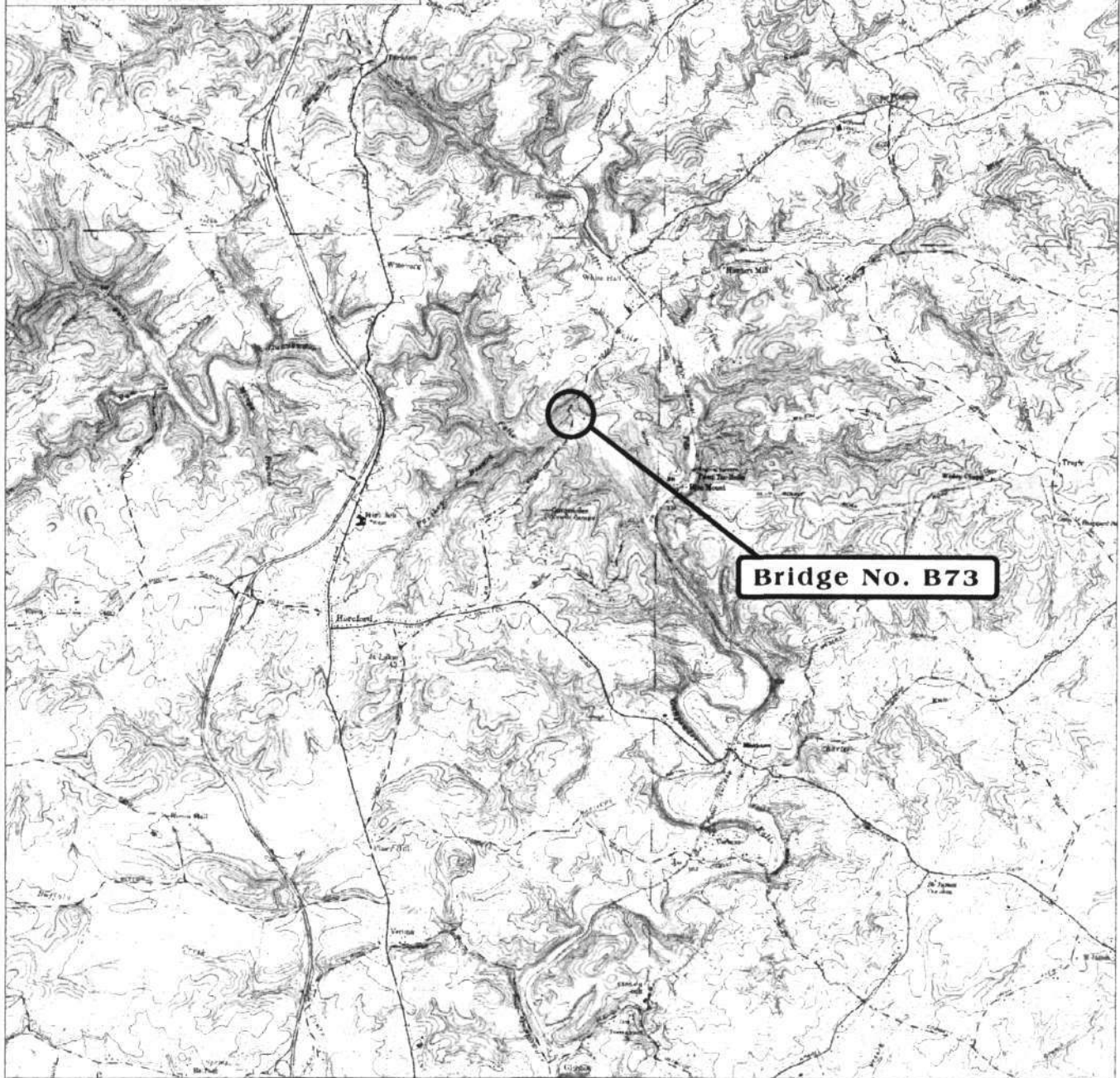
WEST ELEVATION (UPSTREAM)
Bridge No. B73 (BA2851)



TYPICAL SECTION
Bridge No. B73 (BA2851)

**Bridge No. B73 (BA 2851)
Location Map**

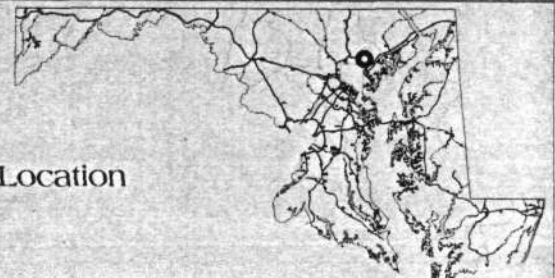
Big Falls Road over Gunpowder Falls
Baltimore County, Maryland
Parkton, MD Quadrangle

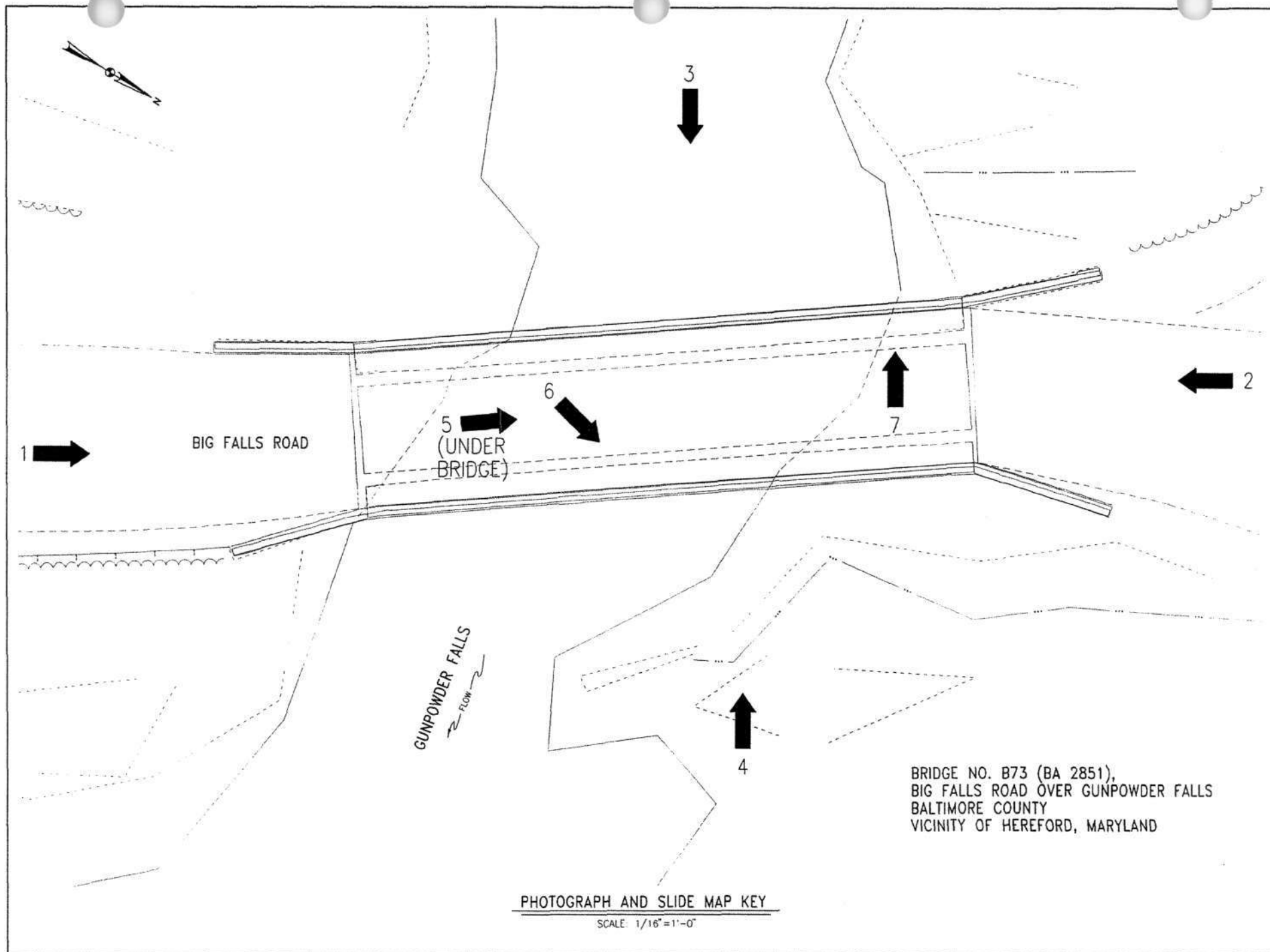


Scale: $\frac{1}{62,500}$

Contour Intervals 20 Feet

Quadrangle Location







MHIP: BA 2851

Name: Big Falls R. over Gunpowder Falls
Baltimore County, MD.

Photographer: Brian Browand, P.E.

Date of Photo: 4/3/2007

Location of Negative: MD SHFO

Description: View looking north across
bridge.

Photo # : 1 of 7



MHIP: BA 2851

Name: Big Falls Rd over gunpowder Falls
Baltimore County; MD.

Photographer: Brian Browand, P.E.

Date of Photo: 4/3/2007

Location of Negative: MD SHPO

Description: View looking South across
bridge

Photo # 2 of 7



MHIP: BA 2851

Name: Big Falls Rd over Gunpowder Falls
Baltimore County, Md

Photographer: Brian Browand, P.E.

Date of Photo: 4/5/2007
brb/ane brb/ane-01-2006

Location of Negative: MD SHPO

Description: View of East Elevation of
Bridge
Photo # 4 of 7



MHIP: BA 2851

Name: Big Falls Rd over gun powder Falls

Baltimore County, MD

Photographer: Brian Browand, P.E.

Date of Photo: 4/5/2007
Baltimore County, MD
Browand, Brian - 01-5886

Location of Negative: MDSHPO

Description: View of Underside of Bridge
looking North
Baltimore County, MD
Browand, Brian - 01-5886

Photo # 5 of 7



MHIP: BA 2851

Name: Big Falls Rd over Gunpowder Falls
Baltimore County, MD

Photographer: Brian Browand, P.E.

Date of Photo: 4/3/2007

Location of Negative: MD SHPO

Description: View of Inside Face of
East Parapet

Photo #: 6 of 7

BALTIMORE COUNTY
HIGHWAYS DEPARTMENT
BIG FALLS ROAD BRIDGE
1933

COUNTY COMMISSIONERS,
ROBERT C. CLARKE, PRESIDENT.
FRANK B. GIVEN.
W. HOWARD MILLING.

JACKSON P. GRASON. GEORGE L. SCHNADER.
ROADS ENGINEER CONTRACTOR.

MHIP: BA 2851

Name: Big Falls Rd over Gunpowder Falls
Baltimore County, MD

Photographer: Brian Browand, P.E.

Drawings: Drawings-R1-E004

Date of Photo: 4/3/2007

Location of Negative: MDSHPO

Ritz, R1807, 04/03/07

Description: Bridge Plaque

Photo #: 7 of 7

Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-285

Name: Big Faus Rd. over Gunpowder Faus

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u> X </u>	Eligibility Not Recommended <u> </u>
Criteria: <u> A </u> <u> B </u> <u> C </u> <u> D </u>	Considerations: <u> A </u> <u> B </u> <u> C </u> <u> D </u> <u> E </u> <u> F </u> <u> G </u> <u>None</u>
Comments: _____ _____ _____	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u> 3 April 2001 </u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u> 3 April 2001 </u>

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. BA-2851

SHA Bridge No. B0073 Bridge name Big Falls Road over Gunpowder Falls (Big Falls Road Bridge)

LOCATION:

Street/Road name and number Big Falls Road

City/town White Hall Vicinity X

County Baltimore

This bridge projects over: Road ☐ Railway ☐ Water ☒ Land ☐

Ownership: State ☐ County ☒ Municipal ☐ Other ☐

HISTORIC STATUS:

Is bridge located within a designated historic district? Yes ☒ No ☐

National Register-listed district ☐ National Register-determined-eligible district ☐

Locally-designated district ☐ Other ☐

Name of district Gunpowder Falls Historic District

BRIDGE TYPE:

Timber Bridge ☐:

Beam Bridge ☐ Truss -Covered ☐ Trestle ☐ Timber-And-Concrete ☐

Stone Arch Bridge ☐

Metal Truss Bridge ☐

Movable Bridge ☐:

Swing ☐ Bascule Single Leaf ☐ Bascule Multiple Leaf ☐

Vertical Lift ☐ Retractable ☐ Pontoon ☐

Metal Girder ☐:

Rolled Girder ☐ Rolled Girder Concrete Encased ☐

Plate Girder ☐ Plate Girder Concrete Encased ☐

Metal Suspension ☐

Metal Arch ☐

Metal Cantilever ☐

Concrete ☒:

Concrete Arch ☒ Concrete Slab ☐ Concrete Beam ☐ Rigid Frame ☐

Other ☐ Type Name _____

DESCRIPTION:**Describe Setting**

Bridge B0073 carries Big Falls Road over Gunpowder Falls in Baltimore County. Big Falls Road runs east and west over the southeasterly flowing Gunpowder Falls. The bridge is located on the very edge of Gunpowder Falls State Park, and is in an area with no residential or commercial development.

Describe Superstructure and Substructure:

Bridge B0073 is a single span, closed spandrel, concrete rib arch bridge. The total length of the bridge is 82 feet with the clear span measuring 79 feet. The spandrel walls are approximately 4 feet tall and 39 feet wide. The bridge has a rise of approximately 5 feet 4 inches from springline to crown. There is a clear roadway width of 20 feet 1 inch, with an overall bridge width of 22 feet 8 inches. The arch barrel has heavy cracking with visible efflorescence. There are small areas of scale and reinforcement bar exposure at the joint of the parapet and spandrel wall. The spandrel walls have moderate areas of cracking and patched areas from previous repairs. In addition, the walls have areas of efflorescence. According to a 1995 inspection report, the bridge is in fair condition with a sufficiency rating of 22.8.

Bridge B0073 retains its original parapets. There are 3 sections running the length of the bridge, including the wingwalls. The first section includes the endblock over the wingwall and measures 3 feet 8 inches high by 4 feet 11 inches wide at the base. The endblock includes an incised panel that is 11 inches high and 7 feet 4 inches long. The rest of the first section is a closed paneled parapet with 3 incised panels. Each panel measures approximately 5 feet long and 1 foot high. This pattern is repeated in the additional 2 sections with a symmetrical endblock. The bridge has large spalls with rusted reinforcement bar exposed. The bridge has large spalls with exposed, rusting reinforcement bars. The entire section on both sides of the bridge has heavy scaling with medium spalls at the curb lines. In addition, there are fine vertical cracks throughout the bridge's parapets.

Discuss major Alterations:

No major alterations have occurred to this structure.

HISTORY:

WHEN was bridge built (actual date or date range) 1933

This date is: Actual X Estimated

Source of date: Plaque X Design plans County bridge files/inspection form

Other (specify)

WHY was bridge built? To replace an existing structure.

WHO was the designer? George L. Schnader

WHO was the builder? Baltimore County Highways Department

WHY was bridge altered? N/A

Was bridge built as part of organized bridge-building campaign?

Yes, this bridge was built as part of Baltimore County road extensions.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

A - Events X **B- Person**

C- Engineering/architectural character X

This bridge was determined eligible by the Interagency Review Committee in June 1996.

Was bridge constructed in response to significant events in Maryland or local history?

It is unknown why the first bridge at this site was built. However, during the early days of improved road construction in Maryland, a policy of building narrow roads and bridges was adopted so that a complete system of highways might be completed within a reasonable time limit and with limited funds. As traffic increased, it became necessary to reconstruct existing roads to greater width and strength. In 1918, the State Roads Commission developed the use of a concrete bridge. This bridge was probably built as part of the State Roads Commission's "Lateral and post Roads Loan of 1920." In 1920, the state received an appropriation of \$3,000,000. The money allowed for the construction of rural post roads, lateral roads, and the extension of the State Roads System with the assistance of funds from the US Government and several counties in the state. The state and counties received funding for lateral road improvements.

Between 1920 and 1935, most of the Baltimore County Highways Department work concentrated on the expansion of the feeder roads to the main arteries being built by the State Roads Commission. Unlike other counties in Maryland during this period, Baltimore County maintained its own roads. Like other counties, Baltimore County has a standing contract with consultants to assist in the design and development of bridges. T.A. Ward was the consultant for this project.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth & development of the area?

No, there is no evidence that this bridge had an impact on the growth of the area.

Is the bridge located in an area that may be eligible for historic designation?

Yes, the bridge is located in the Gunpowder Falls Historic District. The bridge is potentially a contributing element to that district.

Is the bridge a significant example of its type?

Yes, this bridge retains integrity of design and materials, and is a significant example of an early-twentieth century concrete arch bridge.

Does bridge retain integrity of important elements described in Context Addendum?

The bridge retains the integrity of a majority of its character defining elements.

Is bridge a significant example of work of manufacturer, designer and/or engineer?

No, this bridge is not a significant example of the work of a manufacturer, designer, or engineer.

Should bridge be given further study before significance analysis is made?

Yes, this bridge should be given further study to determine if it contributes to the Gunpowder Falls Historic District.

BIBLIOGRAPHY:

County inspection/bridge files X

SHA inspection/bridge files

Other (list):

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded June 1996

Name of surveyor Stacie Webb

Organization/Address State Highway Administration, 707 North Calvert Street, Baltimore, MD

Phone number 410-545-8559

Revised by P.A.C. Spero & Company, April 1998

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# BA-2851
Map B-12 COCKEYSVILLE
County BALTIMORE
Bridge # and name B73; BIG FALLS
RD OVER GUNPOWDER FALLS



Inventory # BA-2851

Name BOOTH- BIG FALLS RD OVER GUNPOWDER FALLS

County/State BALTIMORE COUNTY /MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description WEST APPROACH LOOKING
EAST

Number

1 OF 4



Inventory # BA-2851

Name B0073-BIG FALLS RD OVER GUNPOWDER FALLS

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description SOUTH ELEVATION LOOKING
NORTHEAST

Num 2 OF 4



Inventory # BA-2851

Name BOOTB-BIG FALLS RD OVER GUNPOWDER FALLS

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description NORTH ELEVATION LOOKING

SOUTHWEST

Num

3 OF 4

BALTIMORE COUNTY
HIGHWAYS DEPARTMENT
BIG FALLS ROAD BRIDGE
1933

COUNTY COMMISSIONERS,
ROBERT C. CLARKE, PRESIDENT,
FRANK S. ZIVON,
W. HOWARD MILLING.

JACKSON P. GRASSMAN, GEORGE L. SCHMABER,
ROADS ENGINEER CONTRACTOR.

Inventory # BA-2851

Name BOOTH-BIG FALLS RD OVER GUNPOWDER FALLS

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description PLAQUE ON BRIDGE PARAPET

Num

4 OF 4